

SITOP Power Supplies

Technical specifications



SITOP Power Supplies

Answers for industry.

SIEMENS

Selection table

SITOP power supplies

Input voltage	Output current	modular	smart	LOGO!Power	Facets
24 V output voltage					
1-phase 120 V AC, 230 V AC	0.5 A				6EP1331-2BA10 SITOP power 0.5
	1.3 A			6EP1331-1SH02	
	2 A				6ES7307-1BA00-0AA0 SIMATIC S7-300 design
	2.5 A		6EP1332-2BA10	6EP1332-1SH42	6EP1232-1AA00 SITOP PSA 100E
					6EP1332-1SH12 The universal type
	3.5 A				6EP1332-1SH31 SIMATIC S7-200 design
	3.7 A				6EP1332-2BA00 The Class2 version
	4 A			6EP1332-1SH51	6EP1232-1AA10 SITOP PSA 100E
					6EP1332-1SH22 The universal type
	5 A	6EP1333-3BA00	6EP1333-2AA01		6EP1333-1AL12 Flat design
		6EP1333-3BA00-8AC0	6EP1333-2BA01		6ES7307-1EA80-0AA0 Outdoor
					6ES7307-1EA00-0AA0 SIMATIC S7-300 design
	6 A				6EP1233-1AA00 SITOP PSA 100E
	10 A	6EP1334-3BA00	6EP1334-2AA01		6EP1334-1AL12 Flat design
		6EP1334-3BA00-8AB0	6EP1334-2BA01		6ES7307-1KA01-0AA0 SIMATIC S7-300 design
			6EP1334-2AA01-0AB0		6EP1334-1SH01 The universal type
	12 A				6EP1234-1AA00 SITOP PSA 100E
	20 A	6EP1336-3BA00			
		6EP1336-3BA00-8AA0			
	40 A	6EP1337-3BA00			

Input voltage	Output current	modular	smart	LOGO!Power	Facets
24 V output voltage					
3-phase 400–500 V AC	5 A	6EP1333-3BA00 ¹⁾			
	10 A	6EP1334-3BA00 ¹⁾			
	20 A	6EP1436-3BA01			
		6EP1436-3BA00			
		6EP1436-3BA00-8AA0			
	30 A	6EP1437-3BA00			
	40 A	6EP1437-3BA00-8AA0			
48–220 V DC	0.375 A	6EP1331-2BA10			
48–110 V DC	2 A	6EP1732-0AA0			
24–110 V DC	2 A	6ES7305-1BA80-0AA0			
		6EP1334-1SH01			
110–350 V DC	2.5 A	6EP1332-1SH12			
	4 A	6EP1332-1SH22			
	10 A	6EP1334-1SH01			

Input voltage	Output current	modular	smart	LOGO!Power	Facets
1-phase 120 V AC, 230 V AC	5 V/3 A	6EP1311-1SH02			
	5 V/6.3 A	6EP1311-1SH12			
	12 V/1.9 A	6EP1321-1SH02			
	12 V/4.5 A	6EP1322-1SH02			
	15 V/1.9 A	6EP1351-1SH02			
	15 V/4 A	6EP1352-1SH02			
	3–52 V/2–10 A	6EP1353-2BA00			
	2 x 15 V/3.5 A	6EP1353-0AA00			
3-phase 400–500 V AC	48 V/10 A	6EP1456-2BA00			
	48 V/20 A	6EP1457-3BA00			

¹⁾ Connection to 2-phase 230–500 V AC – see technical specifications of SITOP modular 1-/2-phase

Green: more information in the catalog KT10.1 or in the online catalog CA01

SITOP modular

The modular power supply

				
Technical specifications	SITOP modular 1-phase and 2-phase ¹⁾			
SITOP	Basic unit 24 V/5 A	Basic unit 24 V/10 A	Basic unit 24 V/20 A	Basic unit 24 V/40 A
Order No.	6EP1333-3BA00	6EP1334-3BA00	6EP1336-3BA00	6EP1337-3BA00
– PCB with protective coating	6EP1333-3BA00-8AC0	6EP1334-3BA00-8AB0	6EP1336-3BA00-8AA0	
Input voltage rated value	120–230/230–500 V AC	120–230/230–500 V AC	120/230 V AC	120/230 V AC
– range	85...264/176...550 V AC	85...264/176...550 V AC	93...132/183...264 V AC	95...132/190...264 V AC
Mains buffering	> 25 ms (at 120/230 V)	> 25 ms (at 120/230 V)	> 20 ms (at 230 V)	> 20 ms (at 230 V)
Line frequency rated value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input current rated value	2.2–1.2/1.2–0.61 A	4.4–2.4/2.4–1.1 A	7.7/3.5 A	15.0/8.0 A
– Inrush current (25°C)	< 35 A	< 35 A	< 60 A	< 125 A
– Recommended primary side protection	6 A char. C or 3RV1021-1xA10	6 A char. C or 3RV1021-1xA10	10 A char. C or 3RV1421-1xA10	20 A char. C or 3RV1421-xxA10
Output voltage rated value	24 V DC	24 V DC	24 V DC	24 V DC
– Tolerance	± 3 %	± 3 %	± 3 %	± 3 %
– Setting range	24...28.8 V DC	24...28.8 V DC	24...28.8 V DC	24...28.8 V DC
Output current rated value	5 A	10 A	20 A	40 A
Efficiency at rated value approx.	87 %	87 %	89 %	88 %
Parallel operation for higher performance	Yes, output characteristics can be switched to parallel operation			
Brief overload characteristics	Power Boost: 3 x output current for 25 ms			
Electronic short-circuit protection	Yes, constant current or latching shutdown selectable; constant current: approx. 1.15 x rated output current			
RI specification (EN 55022)	Class B	Class B	Class B	Class B
Line harmonic limitation (EN 61000-3-2)	Yes	Yes	Yes	No
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
Ambient temperature	0...+60°C	0...+60°C	0...+60°C	0...+ 60°C
Dimensions (W x H x D) in mm	70 x 125 x 125	90 x 125 x 125	160 x 125 x 125	240 x 125 x 125
Weight approx.	1.2 kg	1.4 kg	2.2 kg	2.9 kg
Approvals	CE, cULus, SEMI F47 ²⁾	CE, cULus, SEMI F47 ²⁾	CE, cULus, SEMI F47 ³⁾	CE, cULus, SEMI F47 ⁴⁾

¹⁾ Connection to 2 phases of a 3-phase power system

²⁾ For 208–240 V input voltage or with buffer module

³⁾ In conjunction with a buffer module

⁴⁾ In conjunction with two buffer modules

				
Technical specifications	SITOP modular 3-phase			SITOP modular 3-phase, 48 V DC
SITOP	Basic unit 24 V/20 A	Basic unit 24 V/20 A	Basic unit 24 V/40 A	Basic unit 48 V/20 A
Order No.	6EP1436-3BA01	6EP1436-3BA00	6EP1437-3BA00	6EP1457-3BA00
– PCB with protective coating		6EP1436-3BA00-8AA0	6EP1437-3BA00-8AA0	
Input voltage rated value – range	400–500 V 3 AC 360...550 V 3 AC ¹⁾	400–500 V 3 AC 340...550 V 3 AC	400–500 V 3 AC 340...550 V 3 AC	400–500 V 3 AC 340...550 V 3 AC
Mains buffering	> 15 ms (at 400 V)	> 6 ms (at 400 V)	> 6 ms (at 400 V)	> 6 ms (at 400 V)
Line frequency rated value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input current rated value – Inrush current (25°C) – Recommended primary side protection	1.1–0.9 A < 18 A 6–16 A char. C, 3-ph coupled or 3RV1021-1DA10, 3RV1721-1DD10	1.1–0.9 A < 35 A 6–16 A char. C, 3-ph coupled or 3RV1021-1DA10, 3RV1721-1DD10	2.0–1.7 A < 70 A 10–16 A char. C, 3-ph coupled or 3RV1021-1DA10, 3RV1721-1DD10	approx. 2.2 A (at 400 V) < 70 A 10–16 A char. C, 3-ph coupled or 3RV1021-1DA10, 3RV1721-1DD10
Output voltage rated value – Tolerance – Setting range	24 V DC ± 3 % 24...28.8 VDC	24 V DC ± 3 % 24...28.8 VDC	24 V DC ± 3 % 24...28.8 VDC	48 V DC ± 3 % 42...56 VDC
Output current rated value	20 A	20 A	40 A	20 A
Efficiency at rated value approx.	93 %	90 %	90 %	90 %
Parallel operation for higher performance	Yes, output characteristics can be switched to parallel operation			
Brief overload characteristics	Power Boost: 3 x output current for 25 ms, Extra Power ²⁾ : 1.5 x rated output current for 5 s/min			
Electronic short-circuit protection	Yes, constant current or latching shutdown selectable; constant current: approx. 1.15 x rated output current			
RI specification (EN 55022)	Class B	Class B	Class B	Class B
Line harmonic limitation (EN 61000-3-2)	Yes	Yes	Yes	Yes
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
Ambient temperature	–10...+60°C	0...+60°C	0...+60°C	0...+60°C
Dimensions (W x H x D) in mm	70 x 125 x 125	160 x 125 x 125	240 x 125 x 125	240 x 125 x 125
Weight approx.	1.2 kg	2.0 kg	3.2 kg	3.2 kg
Approvals	CE, cULus	CE, UL, CSA, SEMI F47	CE, UL, CSA, SEMI F47	CE, UL, CSA

¹⁾ Extension to 320...575 V in preparation

²⁾ Extra Power only available with 6EP1436-3BA01

SITOP smart

The slim-line universal power supply

							
Technical specifications	SITOP smart 1-phase						SITOP smart 3-phase, 48 V
SITOP	24 V/2.5 A	24 V/5 A	24 V/5 A	24 V/10 A	24 V/10 A	24 V/10 A Wallmount	48 V/10 A
Order No.	6EP1332-2BA10	6EP1333-2AA01	6EP1333-2BA01	6EP1334-2AA01	6EP1334-2BA01	6EP1334-2AA01-0AB0	6EP1456-2BA00
Input voltage rated value – range	120/230 V AC 85...132/170...264 V AC	120/230 V AC 85...132/170...264 V AC	120/230 V AC 85...132/170...264 V AC	120/230 V AC 85...132/170...264 V AC	120/230 V AC 85...132/170...264 V AC	120/230 V AC 85...132/170...264 V AC	400–500 V 3 AC 360...550 V 3 AC
Mains buffering	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 7 ms (at 400 V)
Line frequency rated value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input current rated value – Inrush current (25°C) – Recommended primary side protection ¹⁾	1.1/0.65 A < 14 A 3 A characteristic C	2.1/1.15 A < 32 A 6 A characteristic C	2.1/1.15 A < 32 A 6 A characteristic C	4.1/2.4 A < 65 A 10 A characteristic C	4.1/2.0 A < 65 A 10 A characteristic C	4.1/2.0 A < 65 A 10 A characteristic C	1.1–0.9 A < 18 A from 6–16 A char. C, 3-ph. coupled or 3 RV1021-1DA10 or 3 RV1721-1DD10
Output voltage rated value – Tolerance – Setting range	24 V DC ± 3 % 22.8...28 V DC	24 V DC ± 3 % 22.8...28 V DC	24 V DC ± 3 % 22.8...28 V DC	24 V DC ± 3 % 22.8...28 V DC	24 V DC ± 3 % 22.8...28 V DC	24 V DC ± 3 % 22.8...28 V DC	48 V DC ± 3 % 42...56 V DC
Output current rated value	2.5 A (3 A up to +45°C)	5 A (6 A up to +45°C)	5 A (6 A up to +45°C)	10 A (12 A up to +45°C)	10 A (12 A up to +45°C)	10 A (12 A up to +45°C)	10 A
Efficiency at rated value approx.	85 %	87 %	87 %	90 %	91 %	90 %	93 %
Parallel operation for higher performance	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brief overload characteristics	Extra-Power: 1.5 x rated output current for 5 s/min						
Electronic short-circuit protection	Yes, constant current						
RI specification (EN 55022)	Class B	Class B	Class B	Class B	Class B	Class B	Class B
Line harmonic limitation (EN 61000-3-2)	Not applicable	No	Yes	No	Yes	Yes	Yes
Degree of prot. (EN 60529)	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Ambient temperature	0...+60°C	0...+60°C	0...+60°C	0...+60°C	0...+60°C	0...+60°C	0...+60°C
Dimensions (W x H x D) in mm	32.5 x 125 x 125	50 x 125 x 125	50 x 125 x 125	70 x 125 x 125	70 x 125 x 125	70 x 125 x 125	70 x 125 x 125
Weight approx.	0.4 kg	0.5 kg	0.5 kg	0.75 kg	0.8 kg	0.85 kg	1.2 kg
Approvals	CE, UL, CSA, GL, ATEX, Hazardous Location Class I Div 2 Groups A, B, C & D, T4						CE, cULus

¹⁾ 6EP1456-2BA00: fusing necessary

SITOP Add-ons

All-round protection offer

				
Technical specifications	Signaling	Power failure bridging	Redundancy	Monitoring
SITOP	Signaling module¹⁾	Buffer module¹⁾	Redundancy module	Diagnosis module SITOP select
Order No.	6EP1961-3BA10	6EP1961-3BA00	6EP1961-3BA20	6EP1961-2BA00
Input voltage rated value – range	Contact rating 240 V AC/6 A	24 V DC 24...28.8 V DC	24 V DC 24...28.8 V DC	24 V DC 22...30 V DC
Brief product/function description	Signaling module for lateral snapping onto the basic unit (6EP1xxx-3BA00); automatic contacting; with floating signaling contacts for "Output voltage o.k." and "Operating readiness o.k."; with signal input for remote ON/OFF switching of the basic unit.	Buffer module for bridging power failures; connected in parallel to basic unit's output (6EP1x3x-3BA0x); buffering time 100 ms at 40 A or up to 800 ms at 5 A load current; multiplication through paralleling possible; maximum buffering time 3 s.	Module for redundancy mode. Decoupling of two 5 A to 20 A power supplies or of one 40 A power supply per redundancy module. Floating relay contact and green LEDs for signaling "Feed-in 1 and 2 o.k."; operating point settable from 20 to 25 V DC.	Diagnosis module for monitoring up to four 24 V load feeders; selective disabling of faulty feeders, rated current of between 2 and 10 A individually selectable, with common signal contact and LEDs in multiple colors; universal diagnosis module for all power supplies.
Output current rated value	Not applicable	40 A	40 A (total output current)	4 x 10 A
Efficiency at rated values approx.	Not applicable	Not applicable	97 %	97 %
Parallel operation	Not applicable	Yes	No	No
Electronic short-circuit protection	Not applicable	Yes	No	Yes
RI specification (EN 55022)	Class B	Class B	Class B	Class B
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
Ambient temperature	0...+60°C	0...+60°C	0...+60°C	0...+60°C
Dimensions (W x H x D) in mm	25 x 125 x 125	70 x 125 x 125	70 x 125 x 125	72 x 90 x 90
Weight approx.	0.15 kg	1.2 kg	1.0 kg	0.4 kg
Approvals	CE, UL, CSA	CE, UL, CSA	CE, cULus, ATEX	CE, cULus

¹⁾ Only in combination with SITOP modular power supply

Uninterruptible power supplies

SITOP DC UPS for long-term power failures

						
Technical specifications	SITOP DC UPS for long-term power failures					
SITOP	DC UPS module 24 V/6 A	DC UPS module 24 V/15 A	DC UPS module 24 V/40 A	DC UPS Battery module 24 V/1.2 Ah ¹⁾	DC UPS Battery module 24 V/3.2 Ah ¹⁾	DC UPS Battery module 24 V/7 Ah ¹⁾
Order No. – with serial interface – with USB interface	6EP1931-2DC21 6EP1931-2DC31 6EP1931-2DC42	6EP1931-2EC21 6EP1931-2EC31 6EP1931-2EC42	6EP1931-2FC21 6EP1931-2FC42	6EP1935-6MC01	6EP1935-6MD11	6EP1935-6ME21
Input voltage	24 V, 22...29 V DC, feed via 24 V SITOP power supply:			Rec. final charging level: 26.4...27.3 V DC (> +20°C), 27.3...29.0 V DC (< +20°C)		
	Any	From 24 V/5 A	From 24 V/10 A			
Mains buffering	Depending on battery	Depending on battery	Depending on battery	Approx. 2 minutes at 4 A	Approx. 1.5 minutes at 10 A	Approx. 2 minutes at 20 A
Input current rated value	6 A + approx. 0.6 A for empty battery	15 A + approx. 1 A for empty battery	40 A + approx. 2.6 A for empty battery	Max. charging current 0.3 A	Charging current 0.7 A	Max. charging current 2.5 A
Overload and short-circuit protection	Electronic, automatic restarting			Built-in battery fuse 7.5 A/32 V	15 A/32 V	20 A/32 V
Output voltage rated value	24 V DC (upstream SITOP unit or battery) charging voltage: 27.0 V			24 V DC, 22...27.0 V DC (idle)		
Output current rated value	6 A, charge current: typ. 0.4 A	15 A, charge current: typ. 0.7 A	40 A, charge current: typ. 2 A	2.5 A	10 A	20 A
Efficiency at rated value approx.	Backup mode: 94 %, Ready mode: 95 %	Backup mode: 96 %, Ready mode: 96 %	Backup mode: 97 %, Ready mode: 97 %	Not applicable	Not applicable	Not applicable
Parallel operation	No	No	No	Yes	Yes	Yes
RI specification (EN 55022)	Class B	Class B	Class B			
Degree of prot. (EN 60529)	IP20	IP20	IP20	IP00	IP00	IP00
Ambient temperature	0...+60°C	0...+60°C	0...+60°C	+5...+40°C	+5...+40°C	+5...+40°C
Assembly	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail	Wall mounting
Dimensions (W x H x D) in mm	50 x 125 x 125	50 x 125 x 125	102 x 125 x 125	96 x 106 x 108	190 x 151 x 82	186 x 168 x 121
Weight approx.	0.4 kg	0.4 kg	1.1 kg	2 kg	3.5 kg	6.0 kg
Approvals	CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus

¹⁾ Also available: high-temperature battery module 24 V/2.5 Ah (6EP1935-6MD31) for ambient temperature from –40 to +60°C and battery module 24 V/12 Ah (6EP1935-6MF01)

Selection table: battery modules and power failure bridging times

					
Load current	Battery module 1.2 Ah (6EP1935-6MC01)	Battery module 3.2 Ah (6EP1935-6MD11)	Battery module 7 Ah (6EP1935-6ME21)	Battery module 12 Ah (6EP1935-6MF01)	Battery module ¹⁾ 2.5 Ah (6EP1935-6MD31)
1 A	30 min.	2.5 h	6 h	11 h	2 h
2 A	11 min.	45 min.	2.5 h	5 h	45 min.
3 A	4 min.	25 min.	1.5 h	3 h	30 min.
4 A	2 min.	20 min.	45 min.	2 h	20 min.
6 A	1 min.	10 min.	30 min.	1 h	13 min.
8 A	–	4 min.	20 min.	40 min.	9 min.
10 A	–	1.5 min.	15 min.	30 min.	7 min.
12 A	–	1 min.	10 min.	25 min.	5.5 min.
14 A	–	50 s	8 min.	20 min.	4.5 min.
16 A	–	40 s	6 min.	15 min.	4 min.
20 A	–	–	2 min.	11 min.	–

¹⁾ High-temperature battery module for ambient temperature from –40 to +60°C

SITOP facets in the SIMATIC design and for special applications

						
Technical specifications	SIMATIC S7-300 design				Class 2 approval	SITOP flexi
SITOP	24 V/2 A	24 V/5 A	24 V/5 A Outdoor ¹⁾	24 V/10 A	24 V/3.7 A	3...52 V/10 A
Order No.	6ES7307-1BA00-0AA0	6ES7307-1EA00-0AA0	6ES7307-1EA80-0AA0	6ES7307-1KA01-0AA0	6EP1332-2BA00	6EP1353-2BA00
Input voltage rated value	120/230 V AC	120/230 V AC	120/230 V AC	120/230 V AC	120/230 V AC	120/230 V AC
– range	85...132 V/170...264 V AC	85...132 V/170...264 V AC	93...132 V/187...264 V AC	85...132 V/170...264 V AC	93...132 V/187...264 V AC	85...132 V/170...264 V AC
Mains buffering	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 10 ms (at 93/187 V)	> 10 ms (at 93/187 V)
Line frequency rated value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input current rated value	0.9/0.6 A	2.2/1.3 A	2.2/1.2 A	4.1/1.8 A	1.8/0.7 A	2.2/0.9 A
– Inrush current (25°C)	< 20 A	< 45 A	< 45 A	< 55 A	< 32 A	< 32 A
– Recommended primary side protection	3 A char. C	6 A char. C	10 A char. C	10 A char. C	6 A char. C	6 A char. C
Output voltage rated value	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
– Tolerance	± 3 %	± 3 %	± 3 %	± 3 %	± 3 %	± 1 %
– Setting range	–	–	–	–	22.8...26.4 V DC ²⁾	3...52 V DC
Output current rated value	2 A	5 A	5 A	10 A	3.7 A	2–10 A (120 W max.)
Efficiency at rated value approx.	83 %	87 %	84 %	87 %	>80 %	84 % (at 24 V/5 A)
Parallel operation for higher performance	No	No	No	No	Yes ²⁾	Yes
Electronic short-circuit protection	Yes, restarts	Yes, restarts	Yes, restarts	Yes, restarts	Yes, restarts	Yes, constant current
RI specification (EN 55022)	Class B	Class B	Class A	Class B	Class B	Class B
Line harmonic limitation (EN 61000-3-2)	Not applicable	Yes	No	Yes	Yes	Yes
Degree of prot. (EN 60529)	IP20	IP20	IP20	IP20	IP20	IP20
Ambient temperature	0...+60°C	0...+60°C	–25...+70°C	0...+60°C	0...+60°C	0...+60°C
Assembly	Can be fitted on S7 rail, assembly adapter for DIN rail, 35x15 mm: 6ES7390-6BA00-0AA0				DIN rail	DIN rail
Dimensions (W x H x D) in mm	50 x 125 x 120	80 x 125 x 120	80 x 125 x 120	120 x 125 x 120	70 x 125 x 120	75 x 125 x 125
Weight approx.	0.42 kg	0.74 kg	0.57 kg	1.1 kg	0.75 kg	0.9 kg
Approvals	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, cULus, Class2	CE, cULus

¹⁾ Condensation permissible, increased vibration and shock resistance

²⁾ Permissible only at ambient temperature from 0 to 50°C

SITOP facets special types



Technical specifications	SITOP power 0.5	SITOP flat design		SITOP PSA 100E			
SITOP	24 V/0.5 A	24 V/5 A	24 V/10 A	24 V/2.5 A	24 V/4 A	24 V/6 A	24 V/12 A
Order No.	6EP1331-2BA10	6EP1333-1AL12	6EP1334-1AL12	6EP1232-1AA00	6EP1232-1AA10	6EP1233-1AA00	6EP1234-1AA00
Input voltage rated value	120–230 V AC ¹⁾	120/230 V AC	120/230 V AC	230 V AC	230 V AC	230 V AC	230 V AC
– range	93...264 V AC	85...132/170...264 V AC	85...132/170...264 V AC	187...264 V AC	187...264 V AC	187...264 V AC	187...264 V AC
Mains buffering	> 10 ms (at 230 V)	> 20 ms (at 93/187 V)	> 20 ms (at 93/187 V)	> 10 ms (at 230 V)	> 10 ms (at 230 V)	> 10 ms (at 230 V)	> 10 ms (at 230 V)
Line frequency rated value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input current rated value	0.22–0.13 A	2.2/1.2 A	4/2.5 A	0.65 A	1.1 A	1.4 A	2.5 A
– Inrush current (25°C)	< 23 A	< 32 A	< 65 A	< 30 A	< 30 A	< 35 A	< 50 A
– Recommended primary side protection	From 3 A char. C	From 6 A char. C	From 10 A char. C	From 6 A char. C	From 6 A char. C	From 10 A char. C	10 A char. C
Output voltage rated value	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
– Tolerance	± 3 %	± 1 %	± 1 %	± 3 %	± 3 %	± 3 %	± 3 %
– Setting range	–	22...29 V DC	22...29 V DC	23...26 V DC	23...26 V DC	23...26 V DC	23...26 V DC
Output current rated value	0.5 A	5 A	10 A	2.5 A (+45°C)	4 A (+45°C)	6 A (+45°C)	12 A (+45°C)
Efficiency at rated value approx.	74 %	88 %	89 %	84 %	87 %	87 %	88 %
Parallel operation for higher performance	No	Yes	Yes	Yes	Yes	Yes	Yes
Electronic short-circuit protection	Yes	Yes, restarts	Yes, restarts	Yes, restarts	Yes, restarts	Yes, restarts	Yes, restarts
RI specification (EN 55022)	Class B	Class B	Class B	Class B	Class B	Class B	Class B
Line harmonic limitation (EN 61000-3-2)	Not applicable	No	No	Not applicable	No	No	No
Degree of prot. (EN 60529)	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Ambient temperature	–20... +70°C	0...+60°C	0...+60°C	–10...+70°C (Derating 45...70°C)			
Assembly	DIN rail	DIN rail	DIN rail	Wall mounting and DIN rail, variable installation position			
Dimensions (W x H x D) in mm	22.5 x 80 x 91	160 x 130 x 60	160 x 130 x 60	approx. 52 x 170 x 110 incl. clip for DIN rail			
Weight approx.	0.11 kg	0.6 kg	0.72 kg	0.8 kg	0.8 kg	0.9 kg	0.9 kg
Approvals	CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus

¹⁾ With 48–220 V DC; Order No. 6EP1731-2BA00

LOGO!Power – The mini power packs

									
Technical specifications	54 mm housing				72 mm housing				90 mm housing
SITOP	5 V/3 A	12 V/1.9 A	15 V/1.9 A	24 V/1.3 A	5 V/6.3 A	12 V/4.5 A	15 V/4 A	24 V/2.5 A	24 V/4 A
Order No.	6EP1311-1SH02	6EP1321-1SH02	6EP1351-1SH02	6EP1331-1SH02	6EP1311-1SH12	6EP1322-1SH02	6EP1352-1SH02	6EP1332-1SH42	6EP1332-1SH51
Input voltage rated value – range	100–240 V AC 85...264 V AC				100–240 V AC 85...264 V AC				100–240 V AC 85...264 V AC
Mains buffering	> 40 ms (at 187 V)				> 40 ms (at 187 V)				> 40 ms (at 187 V)
Line frequency rated value	50/60 Hz				50/60 Hz				50/60 Hz
Input current rated value – Inrush current (25°C)	0.36–0.22 A < 15 A	0.53–0.30 A	0.63–0.33 A	0.70–0.35 A	0.71–0.37 A < 30 A	1.13–0.61 A	1.24–0.68 A	1.22–0.66 A	1.95–0.97 A < 30 A
– Recommended primary side protection	From 10 A characteristic C or 16 A characteristic B				From 10 A characteristic C or 16 A characteristic B				From 10 A char. C or 16 A char. B
Output voltage rated value – Tolerance – Setting range	5 V DC ± 3 % 4.6...5.4 V DC	12 V DC 10.5...16.1 V DC	15 V DC 10.5...16.1 V DC	24 V DC 22.2...26.4 V DC	5 V DC ± 3 % 4.6...5.4 V DC	12 V DC 10.5...16.1 V DC	15 V DC 10.5...16.1 V DC	24 V DC 22.2...26.4 V DC	24 V DC ± 3 % 22.2...26.4 V DC
Output current rated value	3.0 A	1.9 A	1.9 A	1.3 A	6.3 A	4.5 A	4.0 A	2.5 A	4.0 A
Efficiency at rated value approx.	76 %	80 %	80 %	82 %	83 %	85 %	85 %	87 %	89 %
Parallel operation	Yes				Yes				Yes
Electronic short-circuit protection	Yes, constant current				Yes, constant current				Yes, constant current
RI specification (EN 55022)	Class B				Class B				Class B
Line harmonic limitation EN 61000-3-2	Not applicable				Not applicable				Yes
Degree of protection (EN 60529)	IP20				IP20				IP20
Ambient temperature	–20... +55°C				–20... +55°C				–20... +55°C
Dimensions (W x H x D) in mm	54 x 90 x 55				72 x 90 x 55				90 x 90 x 55
Weight approx.	0.17 kg				0.25 kg				0.34 kg
Approvals	CE, cULus, FM, GL	CE, cULus, FM, GL, ABS	CE, cULus, FM, GL	CE, cULus, FM, GL, ABS, Class 2	CE, cULus, FM, GL	CE, cULus, FM, GL, ABS	CE, cULus, FM, GL	CE, cULus, FM, GL, ABS, Class2	CE, cULus, FM, GL, ABS

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